UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,928	09/28/2005	Matthew Compton	282592US8X PCT	3691

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EXAMINER
JOHN, CLARENCE

ART UNIT	PAPER NUMBER
2443	

NOTIFICATION DATE	DELIVERY MODE
04/03/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/550,928</td><td>Applicant(s)
COMPTON, MATTHEW</td></tr>
<tr><td>Examiner
CLARENCE JOHN</td><td>Art Unit
2443</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *9/28/2005*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-29* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-29* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *28 September 2005* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some * c) ☐ None of:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *3/3/2008, 3/9/2006, 9/28/2005.*
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

2. Claims 5 -7 recite the phrase "picture repetition period". This phrase is not defined anywhere in the specification.

3. The examiner interprets that the phrase "picture repetition period" applies to "reproduction period" which will determine and implement the said function in the above claims.

4. Claim 25 recites, "Computer Software having program code…". This program code is not defined anywhere in the specification.

5. Claims 26-28 recite, "A providing medium". This medium is not defined anywhere in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 5-7 recite about the digital audio data representing a video signal having a "picture repetition period". This "picture repetition period" is not defined anywhere in the specification.

8. Claims 26-28 recite about a providing medium, storage medium and a transmission medium which are not defined anywhere in the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-10 and 17-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10. Claim 1 recites, " A network interface … an attribute detector arranged to generate attribute data representing an attribute of the audio signal …".

11. It is evident from Specification paragraph [0007] that this attribute detector generates attribute of audio signals by executing a set of software instructions.

12. Therefore claims 1-10, 17-18 are non-statutory under 35 U.S.C. 101 because they are directed to set of executable instructions which is software *per se*, none of a process, machine, manufacture or composition of matter.

13. Claims 11-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

14. Claim 11 recites, "A network destination device … attribute data representing an attribute of the audio signal…".

15. It is evident from the specification paragraph [0011] and [0013] that the source of the signal bearing media can be transmission media such as communication links.

16. Therefore the Claims 11-16 are directed to signal *per se*, none of a process, machine, manufacture or composition of matter.

17. Claims 19-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

18. Claim 19 recites, " A network interface device …a packetiser is operable to format at least the video data of the composite data stream…".

19. It is evident from the specification paragraph [0066] that the packetiser is a signal bearing media which can be transmission media such as communication links.

20. Therefore the Claims 19-21 are directed to signal *per se*, none of a process, machine, manufacture or composition of matter.

21. Claims 22-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

22. Claims 22-24 recite, "A network interface device / destination device connectable to a network …an audio signal…".

23. It is evident from Specification paragraphs [0006] and [0011] that these devices

are signal bearing media which can be transmission media such as

communication links.

24. It is also evident from Claim 26 and 28 that the providing medium is a software

medium and a transmission medium.

25. Therefore the Claims 22-28 are directed to software *per se* and signal *per se*,

none of a process, machine, manufacture or composition of matter.

26. Claim 29 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

27. Claim 29 recites, "A data packet … digital audio signal…".

28. It is evident from Specification paragraph [0011] that the device connected to the

network is operated to receive data packets representing audio signals, which

can be transmission media such as communication links.

29. Therefore Claims 29 is directed to signal *per se*, none of a process, machine,

manufacture or composition of matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another
filed in the United States before the invention by the applicant for patent or (2) a patent granted on an
application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

30. Claims 1-20 and 22-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto et al. (US6529506).

31. With respect to Claim 1, Yamamoto teaches a network interface device connectable to a network, the device being arranged to receive digital audio data representing an audio signal and to launch data packets representing the digital audio data onto the network, the device comprising:

32. an attribute detector arranged to generate attribute data representing an attribute of the audio signal; (Column 24, lines 12-17);

33. and a packetiser operable: to format the digital audio data into audio data packets to be launched onto the network; (Column 2, lines 48-53, Column 22, lines 48-62); and

34. to format the attribute data into attribute data packets separate from the audio data packets to be launched onto the network. (Column 22, lines 56-62. Here the attribute data is transmitted as a data file separated from the audio data).

35. With respect to Claim 2, Yamamoto teaches a device according to claim 1, in which the attribute represents a level of the audio signal. (Figure 10. Here the first bit and second bit represent different levels. Column 19, lines 19-25, Figure 23, Column 15 - lines 22-29. Here Da, Db, Dc are different levels of audio based on methods A, B and C respectively).

36. With respect to Claim 3, Yamamoto teaches a device according to claim 1, being arranged to launch the audio data packets and the attribute data packets onto the network as separate respective multicast groups. (Column 24, lines 12-24. Here the Network Signal which consists of audio data and attribute data are extracted separately by the extraction unit comprising of multiple groups based on methods 1, 2, ...n).

37. With respect to Claim 4, Yamamoto teaches a device according to claim 1, in which the attribute detector is arranged to generate attribute data representing the attribute at periodic intervals. (Column 33, lines 19-24. Here the data is multiplexed by time division multiplexing at every 0.5 second for 15 frames).

38. With respect to Claim 5, Yamamoto teaches a device according to claim 1, in which:

39. the digital audio data is associated with digital video data representing a video signal having a picture repetition period; (Column 35, lines 3-18);

40. the attribute detector is arranged to generate the attribute data at least once in each successive picture repetition period. (Column 33, lines 19-24. Here the attribute data is multiplexed by time division multiplexing at every 0.5 second for 15 frames).

41. With respect to Claim 6, Yamamoto teaches a device according to claim 5, in which the picture repetition period is a frame repetition period. (Column 33, lines 19-24).

42. With respect to Claim 7, Yamamoto teaches a device according to claim 5, in which the picture repetition period is a field repetition period. (Column 33, lines 19-24).

43. With respect to Claim 8, Yamamoto teaches a device according to claim 5, in which the digital video data is received by the device as part of an composite data stream carrying both the digital video data and the digital audio data. (Figure 7, Column 32, lines 56-58, Column 33, lines 19-21. Column 34, lines 35-42. Here the Data Processing Apparatus 140 has both digital video data and digital audio data).

44. With respect to Claim 9, Yamamoto teaches a device according to claim 8; comprising a data converter for converting the digital audio data of the composite data stream into separate digital audio data to be launched onto the network as audio data packets; (Column 26, lines 34-45, Figure 12, blocks Da1, Da2 ...Dan which are separate Digital audio Data packets).

45. in which the packetiser is operable to format the digital video data into video data packets to be launched onto the network. (Figure 8 – Column 33, lines 14-32, Column 35 lines 5-8, Column 36, lines 5-19. Here the digital video data are separated into video data packets and transmitted).

46. With respect to Claim 10, Yamamoto teaches a device according to claim 8, in which the packetiser is operable to format the composite data stream into composite data packets to be launched onto the network. (Column 36, lines 5-19).

47. With respect to Claim 11, Yamamoto teaches a network destination device

    connectable to a network, (Figure 1 and Figure 11, device 156 connected to a

    network via Dbus); the device being operable to receive audio data packets

    representing an audio signal (Column 45, lines 50-57); and being operable to

    receive attribute data packets carrying attribute data representing an attribute of

    the audio signal; (Column 22, lines 38-47);

48. the device comprising a user interface (Column 17, lines 11-15) arranged to

    provide a user indication representing a current value of the attribute data.

    (Column 2, lines 55-61, Column 3, lines 4-6).

49. With respect to Claim 12, Yamamoto teaches a device according to claim 11, in

    which the user interface comprises means for generating a visible indication for

    display on a display screen, (Column 32, lines 60-61, Figure 7, TV receiver

    144b); indicative of a current value of the attribute data (Figure 18a and 18b. This

    represents the value of the image displayed)

50. With respect to Claim 13, Yamamoto teaches a device according to claim 12,

    comprising a display screen. (Figure 7, TV receiver 144b)

51. With respect to Claim 14, Yamamoto teaches a device according to claim 11, in

    which the attribute data represents a level of the audio signal. (Figure 10. Here

    the first bit and second bit represent different levels. Column 19, lines 19-25,

    Figure 23, Column 15 - lines 22-29. Here Da, Db, Dc are different levels of audio

    based on methods A, B and C respectively).

52. With respect to Claim 15, Yamamoto teaches a device according to claim 11, in which the attribute data represents values of the attribute at periodic intervals. (Column 33, lines 19-24. Here the data is multiplexed by time division multiplexing at every 0.5 second for 15 frames).

53. With respect to Claim 16, Yamamoto teaches a device according to claim 11, the device being selectively operable to receive the attribute data packets but not to receive the audio data packets. (Column 22, lines 48-62. Here the user receives the attribute data which is separated from the audio data).

54. With respect to Claim 17, Yamamoto teaches a device according to claim 1, the device being operable to launch the audio packets onto the network substantially in real time. Column 22, lines 52-58).

55. With respect to Claim 18, Yamamoto teaches a data network comprising: one or more devices according to claim 1; (Figure 1 and Figure 11, device 156 connected to a network via Dbus);

56. one or more network destination devices operable to receive audio data packets representing an audio signal (Column 45, lines 50-57); and

57. being operable to receive attribute data packets carrying attribute data representing an attribute of the audio signal; (Column 22, lines 38-47);

58. the device comprising a user interface (Column 17, lines 11-15) ; arranged to provide a user indication representing a current value of the attribute data; (Column 2, lines 55-61, Column 3, lines 4-6). And

59. a network providing data communication between the devices. (Figure 1, Network N).

60. With respect to Claim 19, Yamamoto teaches a network interface device connectable to a network and operable to receive a composite data stream carrying digital video data and digital audio data; the device comprising:

61. a data converter for converting the digital audio data of the composite data stream into separate digital audio data; (Column 26, lines 34-45, Figure 12, blocks Da1, Da2 …Dan which are separate Digital audio Data).

62. a packetiser is operable: to format at least the digital video data of the composite data stream into video data packets to be launched onto the network; (Figure 8 – Column 33, lines 14-32, Column 35 lines 5-8, Column 36, lines 5-19. Here the digital video data are separated into video data packets and transmitted); and

63. to format the separate digital audio data into audio data packets to be launched onto the network. (Column 2, lines 48-53, Column 22, lines 48-62).

64. With respect to Claim 20, Yamamoto teaches a device according to claim 19, in which the packetiser is operable to format the composite data stream into composite data packets to be launched onto the network. (Figure 7, Column 32, lines 56-58, Column 33, lines 19-21. Column 34, lines 35-42. Here the Data Processing Apparatus 140 has both digital video data and digital audio data).

65. With respect to Claim 22 Yamamoto teaches a method of operation of a network interface device connectable to a network, (Figure 1 and Figure 11, device 156 connected to a network via Dbus);

66. the device being arranged to receive digital audio data representing an audio signal (Column 45, lines 50-57); and substantially in real time to launch data packets representing the digital audio data onto the network, (Column 2, lines 48-53, Column 22, lines 48-62); the method comprising the steps of:

67. generating attribute data representing an attribute of the audio signal; (Column 24, lines 12-17);

68. formatting the digital audio data into audio data packets to be launched onto the network; (Column 2, lines 48-53, Column 22, lines 48-62); and

69. formatting the attribute data into attribute data packets separate from the audio data packets to be launched onto the network. (Column 22, lines 56-62. Here the attribute data is transmitted as a data file separated from the audio data).

70. With respect to Claim 23, Yamamoto teaches a method of operation of a network destination device connectable to a network, (Figure 1 and Figure 11, device 156 connected to a network via Dbus);

71. the device being operable to receive audio data packets representing an audio signal (Column 45, lines 50-57); and being operable to receive attribute data packets carrying attribute data representing an attribute of the audio signal; (Column 22, lines 38-47); the method comprising the step of: providing a user indication representing a current value of the attribute data . (Column 2, lines 55-61, Column 3, lines 4-6).

72. With respect to Claim 24, Yamamoto teaches a method of operation of network interface device connectable to a network and operable to receive a composite

data stream carrying digital video data and digital audio data; the method

comprising the steps of:

73. converting the digital audio data of the composite data stream into separate

digital audio data; (Column 26, lines 34-45, Figure 12, blocks Da1, Da2 ...Dan

which are separate Digital audio Data).

74. formatting at least the digital video data of the composite data stream into video

data packets to be launched onto the network; (Figure 8 – Column 33, lines 14-

32, Column 35 lines 5-8, Column 36, lines 5-19. Here the digital video data are

separated into video data packets and transmitted);   and

75. formatting the separate digital audio data into audio data packets to be launched

onto the network. (Column 2, lines 48-53, Column 22, lines 48-62).

76. With respect to Claim 25, Yamamoto teaches Computer software having

program code for carrying out a method according to claim 22. (Column 35, lines

26-31).

77. With respect to Claim 26, Yamamoto teaches a providing medium by which

software according to claim 25 is provided. (Column 7, lines 63-66).

78. With respect to Claim 27, Yamamoto teaches a medium according to claim 26,

the medium being a storage medium. (Figure 1, device 111, Column 18, lines

23-26).

79. With respect to Claim 28, Yamamoto teaches a medium according to claim 26,

the medium being a transmission medium. (Figure 1, device 111 is also a

transmission media)

80. With respect to Claim 29, Yamamoto teaches a data packet carrying data
indicative of an attribute of a digital audio signal, (Column 22, lines 38-47);   the
attribute being detected over a period longer than a sampling period of the digital
audio signal. (Column 33, lines 19-24 and lines 46-49. Here the reproduction
time for the data packet is longer than the initial period).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented
> and the prior art are such that the subject matter as a whole would have been obvious at the time
> the invention was made to a person having ordinary skill in the art to which said subject matter
> pertains. Patentability shall not be negatived by the manner in which the invention was made.

81. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Yamamoto in view of Fielder et al. US (US6446037).

82. With respect to Claim 21, Yamamoto teaches a device according to claim 19,
arranged to receive an audio stream; the packetiser being operable to format the
separate digital audio data (Column 2, lines 48-53, Column 22, lines 48-62); and

83. the audio stream into audio data packets to be launched onto the network.
(Column 2, lines 48-53, Column 22, lines 48-62).

84. Yamamoto teaches the limitations as described in Claim 21. However,
Yamamoto does not explicitly state the audio stream received follows AES
standards.

85. Conversely, Fielder does in fact teach Data channels which have a sixteen bit wide core layer and two four bit wide augmentation layers conforming to standard AES3 which is published by the Audio Engineering Society, AES (Column 2, lines 57-60).

86. Yamamoto and Fielder teach about audio data processing. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Fielder with Yamamoto in order to maintain synchronization and effective buffering of incoming data where error detection is limited to save data capacity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLARENCE JOHN whose telephone number is (571)270-5937. The examiner can normally be reached on Mon - Fri 8:00 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

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more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CJ/
Patent Examiner
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3/23/2009

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